What is claimed is:

1. A power supply device, comprising:

an oscillation control unit that controls output of an incoming DC source;

a power driving unit that converts DC power output from the oscillation control unit into AC power;

a power transforming unit that transforms the converted AC power;

a sensing unit connected in series to one end of a lamp to sense a change of a power applied to the lamp; and

a detection control unit that detects a difference in voltages at both ends of the sensing unit and provides a detected signal to the oscillation control unit.

2. The device as claimed in claim 1, wherein the detection control unit comprises a voltage detection unit that detects the voltages at both the ends of the sensing unit, and a rectification unit that rectifies the detected voltage.

3. The device as claimed in claim 2, wherein the voltage detection unit comprises a differential operational amplifier that detects and amplifies the voltage difference.

4. The device as claimed in claim 3, wherein the differential operational amplifier comprises resistors connected in parallel to both the ends of the sensing unit, and an operational amplifier that amplifies the voltage difference detected through the resistors.

5. The device as claimed in claim 4, wherein the resistors connected to both the ends of the sensing unit have resistance of 1 MΩ or more.

6. The device as claimed in claim 2, wherein the detection control unit further comprises a filter unit that performs low frequency filtering for an output of the rectification unit.

7. The device as claimed in claim 1, a voltage with positive polarity is applied to one end of the lamp, and a voltage with negative polarity is applied to the other end of the lamp.

8. The device as claimed in claim 1, wherein the lamp has one or two external electrode.

9. The device as claimed in claim 1 or 2, wherein the sensing unit comprises a resistor.

10. A liquid crystal display device, comprising:

a lamp driving unit that converts an incoming DC power into AC power, and transforms the converted AC power, and provides the transformed AC power ; and

a light emitting unit including a lamp requiring AC power of a high voltage at at least one end of the lamp, and emitting light in response to the transformed AC power;

wherein the lamp driving unit comprises:

an oscillation control unit that controls output of an incoming DC source;

a power driving unit that converts DC power output from the oscillation control unit into AC power;

a power transforming unit that transforms the converted AC power;

a sensing unit connected in series to one end of the lamp to sense a change of a power applied to the lamp; and

a detection control unit that detects a difference in voltages at both ends of the sensing unit and provides a detected signal to the oscillation control unit.

11. The device as claimed in claim 10, wherein the detection control unit comprises a voltage detection unit that detects the voltages at both the ends of the sensing unit, and a rectification unit that rectifies the detected voltage.

12. The device as claimed in claim 11, wherein the voltage detection unit comprises a differential operational amplifier that detects and amplifies the voltage difference.

13. The device as claimed in claim 12, wherein the differential operational amplifier comprises resistors connected in parallel to both the ends of the sensing unit, and an operational amplifier that amplifies the voltage difference detected through the resistors.

14. The device as claimed in claim 13, wherein the resistors connected to both the

ends of the sensing unit have resistance of 1 MΩ or more.

15. *The device as claimed in claim 11, wherein the detection control unit further* comprises a filter unit that performs low frequency filtering for an output of the rectification unit.

16. The device as claimed in claim 10, a voltage with positive polarity is applied to one end of the lamp, and a voltage with negative polarity is applied to the other end of the lamp.

17. The device as claimed in claim 10, wherein the lamp has one or two external electrode.

18. The device as claimed in claim 10 or 11, wherein the sensing unit comprises a resistor.